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Magnesium Metallic Complex Coordinated Phenolic Used for Inhibitor of Reactive Oxygen Species (ROS) in Biological System

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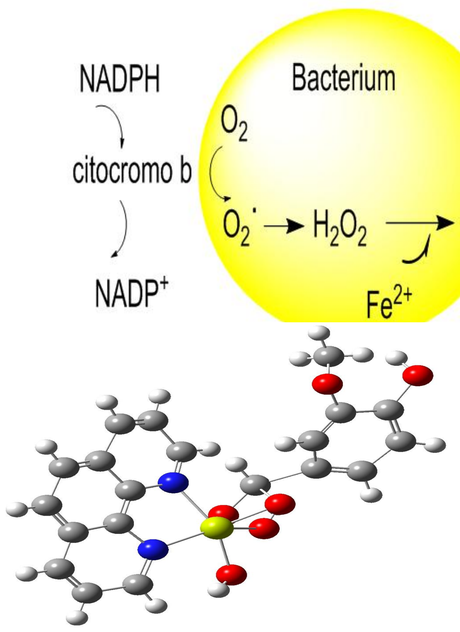
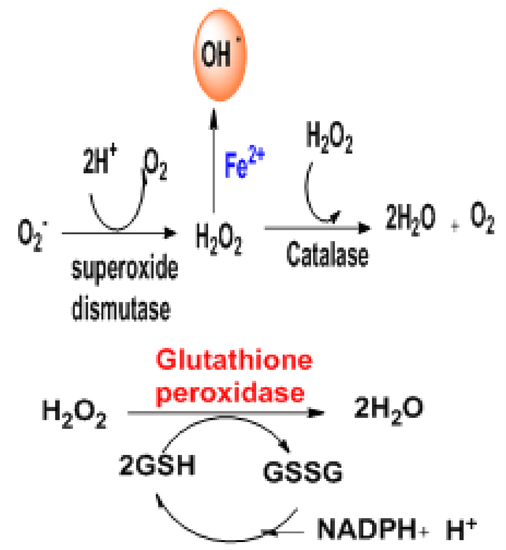
Introduction



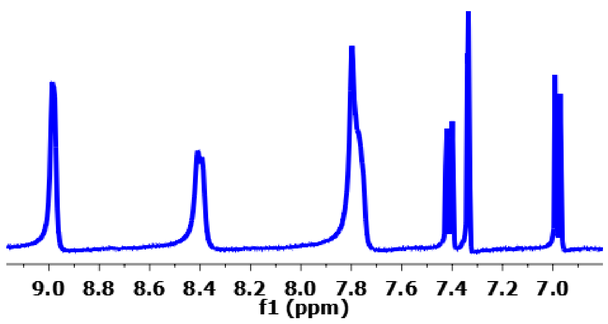
Mitochondrias are essential organelles for the life and death of the cell, participating of the cellular energy metabolism as well as in the control of programmed cell death[1]. But are responsible for the major source of reactive oxygen species in vivo, thus being mitochondrial oxidative damage one of the main causes of many chronic diseases.



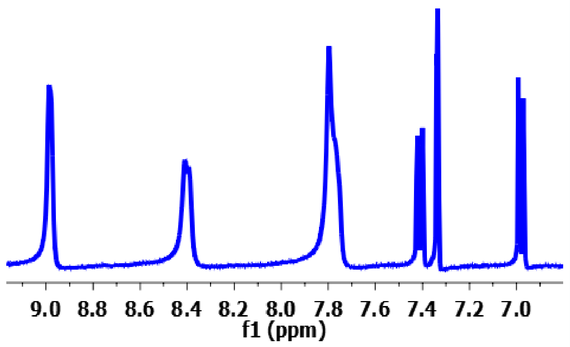
Results and Discussion

Spectroscopic Investigations

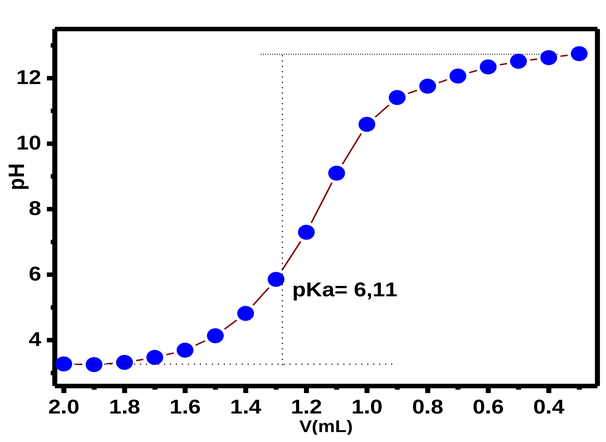
1 - NMR H^1 pH 4.0

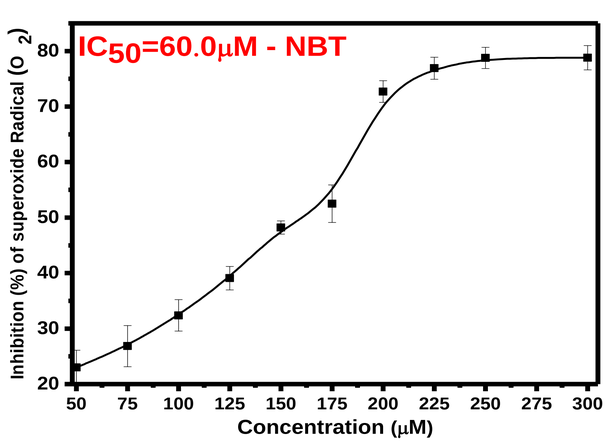


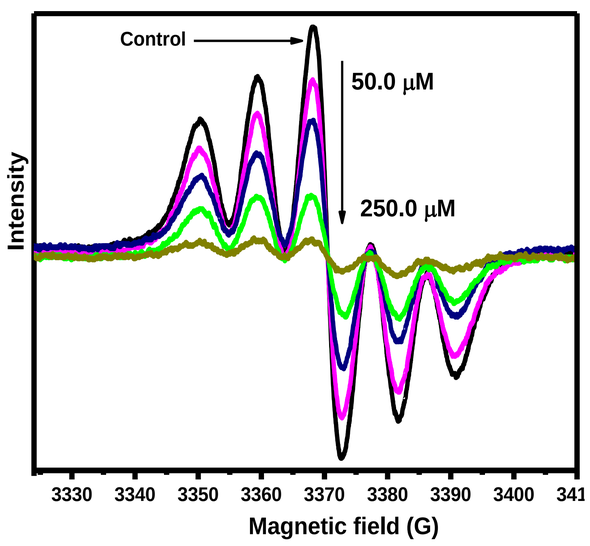
2 - NMR H^1 pH 10.0

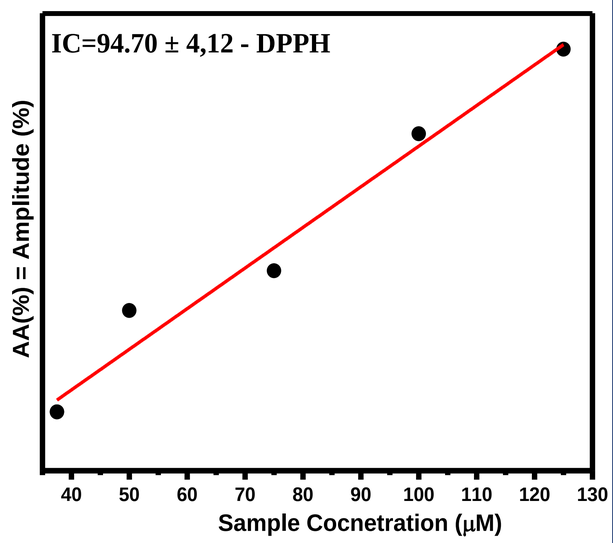


pKa and Antioxidant Study









Experiments in Vivo

Kidney

Brian

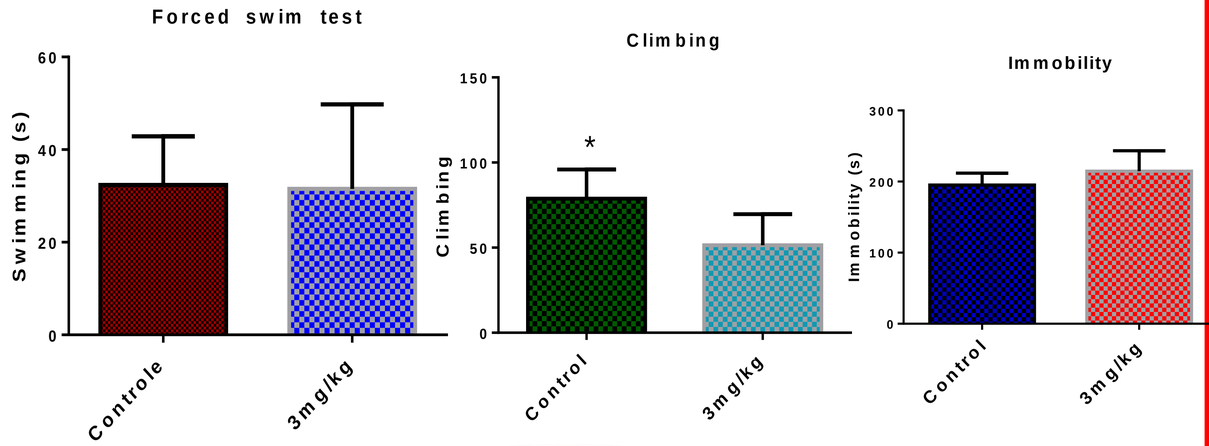
Hippocampus cortex front striated

GSH – Glutathione

Kidney

SOD – Dismutase superoxide

Hippocampus



**p<0.05*

Conclusion

The results showed an increased SOD activity in the hippocampus, thus indicating which this complex can stimulate the production of SOD in the brain and stimulate the production of glutathione (GSH) in kidney. The best antioxidant in the human body.

Acknowledgment

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